

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052791 A2

(51) International Patent Classification⁷: **G06F 9/445**

(21) International Application Number:
PCT/GB2004/004554

(22) International Filing Date: 28 October 2004 (28.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0325146.9 28 October 2003 (28.10.2003) GB

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

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(54) Title: **MAPPING OF DYNAMIC LINK LIBRARIES IN COMPUTING DEVICES**

Step 1 Remapping component before Loading

A	export 1 = ?
A+1	export 2 = ?
A+2	export 3 = ?
Relocations	
<ul style="list-style-type: none"> Set A to be contents of export 3 in new.dll Set A+1 to be contents of export 2 in new.dll Set A+2 to be contents of export 7 in another.dll 	

Step 4 Execution Sequence

1000	call 1009
1009	jump to address in 1010
3027	<instructions to implement foo>

Step 2 Loading of executable, remapping component and new.dll

Executable	Remapping Component	new.dll
1000	call 1009	3000 export 1 = 3019
1009	jump to address in 1010	3001 export 2 = 3008
1010	data = ?	3002 export 3 = 3027
set 1010 to be contents of export 1 in original.dll		3027 <instructions to implement foo>

Step 3 Complete the relocations

Executable	Remapping Component	new.dll
1000	call 1009	3000 export 1 = 3019
1009	jump to address in 1010	3001 export 2 = 3008
1010	data = 3027	3002 export 3 = 3027
		3027 <instructions to implement foo>

(57) Abstract: A remapping component is provided for facilitating a link between an executable and a function held in a new dynamic link library (DLL) in a computing device. The remapping component is provided with a relocation instruction arranged to update, upon loading, an export data table entry for the remapping component with the address location of the function in the new dynamic link library. In this way, the executable, when calling for the function at an address location in a known DLL, will automatically jump to, the address location for the function in the new DLL. The additional subroutines usually associated with remapping DLLs can therefore be avoided, providing improved operation for the computing device.

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